

PD HaW Datasets characteristics

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	Dataset Name	Number of subjects	Percentage of male	Average subject age	Tasks	Measurements	Medicated patients	Mean H&Y stage	Mean Disease duration (year)	Sample rate (Hz)
PD	Rosenblum [1]	20	55,0	61.18	1) write their name. 2) copy an address (same address for all).	Displacement, pressure, and pen-tip angle were sampled at 100 Hz	Yes	?	?	?
Controls		20	55,0	61.66						
PD	PaHaW* [2]	37	51,4	69.3	1) Archimedean spiral. 2) write "I" 3) write "le" 4) write "les" 5) lektorka 6) porovnat 7) nepopadnout 8) Tramvaj dnes už nepojede	x-coordinate, x[t]; y-coordinate, y[t]; time stamp, s[t]; button status, b[t]; pressure, p[t]; and discrete time t. Button status is a binary variable, being 0 for in-air movement and 1 for on-surface movement.	Yes	2,27	8,37	200
Controls		38	52,6	62.4						
PD	NewHandPD* [3]	31	58,1	57.83	1) 4 spirals 2) 4 related meanders 3) circle in the air 4) circle on the paper 5) right-handed diadochokinesis 6) left-handed diadochokinesis	- CH1: Microphone; • CH 2: Fingergrip; • CH 3: Axial Pressure of ink Refill; • CH 4: Tilt and Acceleration in “X direction”; • CH 5: Tilt and Acceleration in “Y direction”; and • CH 6: Tilt and Acceleration “Z direction	Yes (confirmed by C. Pereira, mail subject "NewHandPD Dataset")	?	?	1000
Controls		35	60,0	44.06						
PD	PDMultiMC [4]	16	75,0	matched	Task 1: Repetitive -cursive letter (letter l) Task 2: triangular wave Task 3: rectangular wave Task 4: Repetitive “Monday” word; Task 5: Repetitive “Tuesday” word; Task 6: Repetitive subject’s name; Task 7: Repetitive subject’s last name;	Spatial displacement (x, y positions), pen pressure, time stamp, pen status and pen-tip angle (altitude, azimuth)	Both on and off	1,9	?	?
Controls		16	31,3							
PD	Parkinson Disease Spiral Drawings Using Digitized Graphics Tablet* [5]	62	?	?	1) Static Spiral Test (SST) 2) Dynamic Spiral Test (DST). 3) Stability Test on Certain Point (STCP).	X ; Y; Z; Pressure; GripAngle;	?	?	?	?
Controls		15	?							
PD	San Luciano et al. [6]	138	54,0	65	ten Archimedean spirals with each hand	x, y, and pressure axes and time	Both on and off	?	7.25±4.73	?
Controls		150	39,0	64						
PD	Zham et al. [7]	27	77,8	71.41	spirals	x, y, and pressure	yes	1,814814815	6.7 ± 4.44	133
Controls		28	78,6	71.32						

[1] Handwriting as an objective tool for Parkinson’s disease diagnosisSara Rosenblum • Margalit Samuel • Sharon Zlotnik • Ilana Erikh • Ilana Schlesinger 2013

[2] Analysis of in-air movement in handwriting: A novel marker for Parkinson’s disease. Peter Drotár a , Jiří Mekyska a , Irena Rektorová b,* , Lucia Masarová b ,Zdenek Smékal a , Marcos Faundez-Zanuy c

[3] Handwritten dynamics assessment through convolutional neural networks: An application to Parkinson’s disease identification. Clayton R. Pereira a , Danilo R. Pereira b , Gustavo H. Rosa c , Victor H.C. Albuquerque d , Silke A.T. Weber e , Christian Hook f , João P. Papa

[4] Feature Selection for an Improved Parkinson’s Disease Identification Based on Handwriting. Catherine Taleb (1)(2), Laurence Likforman-Sulem (2), Maha Khachab (1), Chafic Mokbel (1)

[5] Improved spiral test using digitized graphics tablet for monitoring Parkinson’s disease. Muhammed Erdem Isenkul a , Betul Erdogdu Sakar b Olcay Kursun

[6] San Luciano, M., Wang, C., Ortega, R. A., Yu, Q., Boschung, S., Soto-Valencia, J., ... & Saunders-Pullman, R. (2016). Digitized spiral drawing: A possible biomarker for early Parkinson’s disease. PloS one, 11(10), e0162799.

[7] Zham, P., Kumar, D. K., Dabnichki, P., Poosapadi Arjunan, S., & Raghav, S. (2017). Distinguishing different stages of Parkinson’s disease using composite index of speed and pen-pressure of sketching a spiral. Frontiers in neurology, 8, 435.

* Publicly available